

# Ebitreburlilezeq 

## 

## Featuring

* DISPLAY MODE - a big object, for instance a ship in full sail, using all the eight sprites can be designed easily. All the eight sprites can be viewed together to give the full view of the ship. Any of the sprites making up the ship can be edited, scrolled or rotated while the whole ship is in view.
* OVERLAY MODE - Up to eight sprites can be overlayed.
* ANIMATION - A really useful feature. A horse can be taken through its paces from canter to full gallop.
* SCROLLED - in normal or multicolour mode.
* 336 sprites storage.

Many useful hints, tips and information about the working of the video chip in CBM 64.

Easy to incorporate the sprites in your own BASIC or machine code programmes.

A must for a BEGINNER or PROFESSIONAL programmer.

Ready to use sprites for beginners including a demonstration programme to show all the features of the Sprite Machine.


## Cassette version £9.95 Disk version £11-95

## HOME COTPUING WE=Kiy

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March 12-March 18, 1985 No. 103

## SOAPBOX

Magazines are regularly criticised for the quality of their pogrem listings.

HCW has had it's mistakes 100 , but there are certain theps which you can take 10 give yourself a better chance of success.

When typing listings don't Iry to do too much at once. Do it in litule sections with erest period in between Iyping, Save the program to rape or disc each time yous have a reat, then if you make a mistake you haven't lost everything. Use a ruler to make line following easiter. Try 10 understand the listing styte. For extumple Spectrum listings are printed in HCW with all the graphic chafacters printed as underlined capitals. Pul your machine in graphics mode ard then press the levter shown. Commodore 64 listings often have control characters printed as reversed letters and symbols, We try to pul REMM near these to explain the symbols, so read them cetefully belore typing the tine.

We have tested all the prograns in this and every onher issue. If you really cen't get a progrem to work let ita know, but please remember Ihat 90 per cent of errors are due to inaccurate typing. I know - I have typed in lots of listings myself.

Dave
If you have something to say why not send us your thoughts, We will consider any points of view for Soapbax or for our leters page ond we offer a prize for all shase printed.

## COMING SOON...

Teach yourself jargon, our puli our guide to computer user language. Sony MSX, is it really a Bit of a Hit - full user neview. Exploding characters, BBC utility programming feature. Lots of reviews, bags of programs and oodies of news. Read HCW first!

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## BASIC LIVING


by Jon Wedge and Jim Barker


The Computer Dictionary by Jon Wedge and Jim Barker ls available from a a C Biack, price ©3.95


## Technical tips

After being innundated with enquiries from players having problems with Technician Ted, Hewson Consultants has issued a set of tips for serious players.
The game, featured in a recent HCW competition, is set in an office environment in which you control Ted as he tries to get through a day's work.
We too have had a number of enquiries about the game, and we will soon be publishing the map in our Ventures column.
For those who can't wait here are the tips from Hewson Consultants.
All tasks must be done in the right order, and you must work out the order for yourself. Technician Ted has a full event processor so that rooms change as the game progreses. If a room looks easy or empty, then it is probably not the time to attempt the task within it.
Technician Ted graphics are ultra-smooth and collision detection is exact, so that starting position is even more important than in ordinary platform games. The PAUSE facility can often be used to ensure that the correct starting position is used.
Similarly a jump can be made from a precise position by first jumping vertically, and then pressing left or right (as appropriate) whilst Ted is still in the air.

Time is of the essence. Many rooms have been timed so that the skilled player can pass through without pausing provided the makes the right moves from the correct positions.
Similarly when a lask has been completed it can sometimes be faster to loose a life deliberately so that Ted is reset to the required exit.
The order in which tasks must be completed is roughly the same as might be expected during an ordinary working day.
Rest assured, the game can be completed within the time limit!

Hewson Consultants, Hewsont Hse, 566 Milton Trading Est, Milton, Abingdont, Oxon OX14 $4 R X$

## Deal sealed on war games

## Two forces in the software

 industry have agreed to become allies in a new agreement signed recently.Lothlorien, wargaming specialist, has agreed that Argus Press Software will handle production and marketing of it's future titles. Argus was researching the area of wargaming and had intended to release it's first games this spvins.

An Argus spokesman said: "As we wanted to move into wargaming ourselves, we didn't feel we could do any better than line up with the number one company."
Lothlorien is probably best known for it's games Johnny Reb and Redweed. Both warbased games involve you manipulating your armies manipurating opposition. They
against the op

have good graphical layouts, which give added interest.
The company is owned by hree partners - Roger Lees, Mike Cohen and Geoff Street - who were all at school together and the company started, like a number of others, by one partner writing a game on the ZX81 computer and selling it through a magazine advert.
Tyrant of Athens was followed by other games on the ZX8I and Lothlorien has moved on to produce games for a number of home machines. The partners claim they have ideas for three new titles each month, so Argus could have it's hands full coping with Lothlorien's tactical advance.

M C Lothlorien, 56a Park Ln, Poynton, Cheshire SKI2 1AE Argus Prest Soitware, 232 Regent St, Lundon wIt 700

## ag



Roger Lees, M C Lothlorien director.......snd Mike Cohen

## Speak to a star

If you've ever wanted to interview a computer personality Micronet 800 will soon be giving you the chance.

Due to start on Wednesday 20th March, their Prestel-based service will give you the chance
mitted down the line and the interviewee types an answer which is sent back to you.
Other users of the system can read the questions and answers in just the same way CB users can hear other peoples conversations.
Here's the 'diary' of celebrities hanging on the telephone:

| 20 March Michael Feldman |
| :--- |
| 27 March |
| 3 Aprek Meakin |
| Guy Kewney |
| 10 April |
| Mike Singleton |
| 17 April |
| 24 Aprial Duffy |

## 4 Buffs on 4 <br> Database Publications <br> Computer journalist <br> Games author <br> GOSH <br> Watford Electronics

to talk to such personalities from the comfort of your own home, using your computer and a modern.
The service will be fully interactive. You type a question on your computer, it's trans-

The sessions will each last an hour, from 7 to 8 pm - when phone calls are at their cheapest.

Micronet 800, Herbal Hill, London ECI

## Software Selection New Releases

Firebird is offering a Porsche 924 to the winner of the new game Gyron. Due for release next month, the game deals with the destruction of a computer, not yours - the enemy's!

Claimed to be 'the most demanding game yet for the Spectrum', you will need to combine strategy with timing and manual dexterity. In the Gold series, the game will cost $£ 9.95$.

Released on 23 rd February, Dukes of Hazzard, from Elite, will try to follow the success of Airwolf. As you might expect, the game centres mround the scrapes of Bo and Luke Duke in their General Lee car.

There are nearly 100 animated frames, and the car can be seen jumping and tumbling all over the VDU. The first program will be for the 48 K Spectrum.

Other new programs are:
Emerald Isle

## ACE

Xargon Wars
Hypercircuit Master of the Lamps The Music Studio Web Dimension Pastinder Rock "a' Bolt
Greal American
Cross Country Road Race
The Tracer Sanction
Mindshadow
Royal Quesi
Berks
Interdictor Pilat

## Computer health

Rumbelows, the electrical retail and television rental company, has begun operating a new service, Called Service Clinic, customers will be able to have electrical appliances repaired very quickly and the service extends to some makes of popular home computers.

There are 40 Service Clinics throughout the country, all of which are purpose built. Customers can either drop their equipment in or have it picked up at their home. Opening hours are 8.30 am to 6 pm .
Rumbelows, 10 Doughty St, London WCIN 2PL

## Expand your memory

Commodore 16 and Plus4 users will soon be able to add an extra 64 K to their machines.

Micro Component Trading has developed a 64 K RAM card which, it is claimed, will be totally compatible with all software which runs on the standard machine.

Another feature of the machine is that it can be fitted without any modifications to the main PCB and even leaves the cartridge port free for other peripherals.

Expected to cost about $£ 60$, including post and packaging, it will give users a total of over 60K user memory in test mode and over 48 K in high resolution modes.

If you want to know how you use all this extra memory, you'll be pleased to hear that there will be special software developed by other companies, such as Artic, for the system. Just imagine the number of locations you can have in a 60 K adventure!

## Micro Component Trading, Fishers Lane, Norwich,

 Norfolk, NR2 IET

## Winners, all

There were seven differences in our New Generation spot the difference competition.
These are the names of the 65 winners who will each receive Shoot the Rapids and Cliff Hanger: Sandra Gough, Mitcham: David Porter, Rochford; Billy Bendon, Leyton; Kevin Whitfield, Haverhill; Lee Russeli, London: Chris Whitehead. Bolton; John Cain, Canning Town; K F Hughes, Bristel; Kevin O'Connor, Airdrie; Angus Crowther, Nairn; Darren Marshall, Lewisham: A S Wheeler, Crewton; Adrian Rea, Buraley; Rekoms Filip, Belgium; R G Harris, BFPO 29; D Penaluna. Newcastle; John Flynn, Birmingham; Richard Hirst, Huddersfield; Stuart Preston, Carlisle; Dennis Richards, London: M Ridler. Tamworth; S Eaton, Noltingham; ; Kingsbury. St Alhan: W Chaik, London; Philip Otton, Exeter: D Rocbuck, Lymingion; K W Peterson, Grassendale: W Fairbairn, Fort William; W R

## Whixy kids '0d

The prizes in the John Menzies Young Programmers of 1984 competition will be awarded this month and will total £15,000-worth of computer equipment. It will be distributed between the winning teams and their schools.
The top three schools are in Suffolk, Falkirk and Notting.
ham and there are also 20 regional finalists who will receive f2s0-wrorth of ofmip-
moml
The entrants were asked to write a computer program to

Drinkwater, Portsmouth; Wayne Ellis Byrom, Manchester; James Lam, Sireatham; Gary Chapman. Barnsley; Mark Pepperrell, Feltham; Karen Rolph, Heaton; Colin Nowell, Manchester: Jason Chapman, Haywards Heath; Robert Anderson, Hebburn; $P$ Marsh, Warlingham; A F TurnerHowe, Basingsioke; P J Ashforth, Hull; Marlin Thomas, Swansea; R T Russell, Dagenham; Alan Carnegie, Sirathclyde; Angela Scerri, Luton; Ving Chhoy, Birmingham; Linda Cook, Lowestoft; A F Judge, Watford; D P Reynard, Bradiord; Joseph Toomey, London; Jonathan Biddle, Leiston; lan Sweency, Croydon; S Chua, Birmingham; Robert Stuckey, Bristol; D Rehm, Hampton; Dale Russell, Warminstor; Darten White, Whistable; R K Sisson, Nottingham: Kayvan Moghadam, London; C Crane, Sloke-on-Trent; Stephen Ewer, Suffolk; Paul Wareham, Gerrards Cross: TJ Williams, Rushdent Nigel Richmond, Ches: terfield: Paul Roberis, Cardiff; Robert Stokes, Eccles.
find the missing numbers in a sequence. The computer also had to report what it was doing whilst searching for the answer, so an observer could follow the process.

Robert Black, retail manag. ing director of John Menzies, said: "All the schools taking part obviously put an enormous amount of effort into tackling the problem. It has been very difficult choosing the final winners.:

John Menzies, Hanover Buildings, Rose Street, Edin. burgh EH2 2 Ya

## Computer health

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Rumbelown, 10 boughty 5t, London WCIN 2PL

## Cheap talk

Cheetah Marketing's speech output device for the Spectrum - the Sweet Talker - has been reduced in price to $£ 24.95$. According to Cheetah, this is in tine with the company's policy to provide high quality products at the lowest possible prices.
Cheetah Marketing claims that the Sweet Talker is an elegant implementation of the allophone approach to speech synthesis which provides users with powerful, comprehensive and wide ranging speech output facilities.
The package includes the plug-in module, a comprehensive instruction manual and a demonstration cassette.

Cheefah Marketing Lid, 24 Ray St, London ECIR 3DJ



FEATURES PLAY THE COMPUTER LEVELS BUILT IN FATIGUEFACTORS-HOT \& \& \& $\quad$ \& STREAKS - FOULS - A STOP CLOCK - AND A REFEREE - INSTANT ACTION REPLAY JOYSTICK CONTROL

## arida in :


#### Abstract

Albums, sweatshirts and games on offer this week in our Give my Regards to Broad Street competition from


## MIMD CMYIES

 NS

## Commodore User

ك However well you do, the game remains exciting, nail biting stuff. 'In space no one can hearyou scream' the blurb says. My neighbours aren't so fortunate - l've been giving them a hard time. But who needs neighbours with entertainment like this.?

## Personal Computer World

6 The screen display is split into three areas: a map of each of the ship's three levels; a report monitor which displays the ship's and crew's status (who's next on the Alien's menul); and a command monitor, The command monitor presents you with the instructions available to you; these can be selected with a joystick. This is a particularly nica feature of the game as it eliminates typing errors.
The Alien you encounter can either be a timid beasty or a blood-curdling monster, and no doubt the intensity of your screams will reflect this.
From beginning to end you're looking over your shoulder. 2

## Games Computing

©The game follows the track of the film quite closely, with a iarge number of variations. (If you knew exactly what was going to happen the game would get very boring.)
The game is basically of a strategy type with adventura bits thrown in as well.9

## Your Commodore

© The novice will require a few attempts to become accustomed with the game but the authors have thoughtfully provided s short scenario option for the space-rookis.
The cassette is accompanied by a booklet giving clear instructions for play and a summary of the film. To appreciate the game's subleties, it will help to have seen the movie which would also give the player some idea of what to expect. I hid under my cinema seat first time round the game is true to the film. Only the bravest players should confront the Alien in the small hours of the morning, P'Il say no more - the hairs on my neck are bristling again,?

## Home Computing Weekly

6At first I was disappointed as Alien is neithar wholly adventura nor arcade, but after playing several times I can say that this game grows on you. The sound effects add to the suspense as does the sudden arrival of the monster?


ARGUS PRESS SOFTWARE LTD Liberty House, 222 Regent Street, London WIR TDB

## Commodore 64

Now available for SPECTRUM 48K
 a class of it's own, has forty different screens.
Aptly described as a fast moving adventure, with the minimal amount of dialogue because there's just not enough time for reading.
The art work involved in POKEing the characters and locations to the sereen is phenomenal. These are undoubtedly the best graphics 1 have seen on any micro, tantamount to being a feast to my cathodic cyes.
Haunting music accompanies the action, in itself a pertinent example of how to exiract the full potential from the Amstrad's powerful sound commands. All haunting imagery smacks of artistic skill and imaginative forethought which have gone into the compilation of this unique progratm.
As in traditional adventures, you have to collect and drop articles along the way. All of this is done graphically, before your very eyes. The smooth fast movements are akin to the concept of cartoon animation and need to be seen to be believed.
Your objective is to release all the sorcerers from captivity within a fixed time limit, whilst avoiding various spooky looking nasties who sap your energy. This game requires fast reactions and dexterity with the joystick.
You will be riveted to your seat right from the opening titles. Instructions and several screen pictures are shown on the elaborate casselte inlay.

Buy this one whilst stocks last!
D.H.

Price: $£ 8.95$
Publisher: Virgin Games Lid
Address: 61-63 Portobello Rd, London WII 3DD



## Indiana Jones in the Lost Kingdom

The cassette fast loads so Indiana can pass quickly into the Lost Kingdom. Once there you, or him, are on your own.

Your objective is to work your way through six rooms gaining as many points as possible and retrieve an artefact somewhere within the rooms. How to do this nobody knows. You have to work out the rules and find out how to control Indiana by experimenting.

The cassette inlay card teils you that you can play with one or two players and select one of three skill levels, You also choose where to begin. Naturally 1 tried skill level one and slarted in a different room each time.
As you are not supposed to know the rules it's a bit dirficult to describe the action without giving anything away. However, action there is. On one screen I eventually realised that I had to dash from one side to the other, jumping on moving platforms and avoiding attacking thingies. Another screen had me avoiding an ever increasing rumber of bouscing balls while the sereen gradually shrunk in size. On one or two occasions I knew what I wanted to do, but couldn't figure out how to from the joystick.

The screens, or rooms were varied and one never knew quite what to expect. The graphics were okay, but the sound became a bit monotonous after a time. You could take a tea break playing this game: pressing the space bar paused the game and pressing 77 resumed the action. This is also useful for those who get out of breath quickly. Generally an average game, a bit pricey, capitalising on the success of the film.
L.C.

Price: $\$ 9.95$
Publisher: Mindscape
Address:



## Firebug

Engine driver, pilot or fireman are all careers young children dream about, but being a fireman often holds first place.
Firebug uses a screen layout similar to Snapper: multi-noors with interconnecting ladders, but with far more happening. three different sereens and increasing levels of difficulty with each round.
The game takes place in a perrol warehouse where a firebug is running around lighting fires. The player takes the part of a fireman who has the job of collecting the drams of petrol and dumping them safely into a water tank.
There are fire extinguishers scattered around the complex and the fireman can carry one to put out the fires, but he can't carry drums as welt as extinguishers, so you takes your choice.

If the fires are allowed to spread to the drums they explode and raise the temperature in the building by $10^{\circ} \mathrm{C}$. If the temperature reaches $100^{\circ} \mathrm{C}$ the rest of the drums explode and the warehouse fills with fire and smoke to end the game.
There are various dangers to which the fireman is exposed. If he steps on a fire or runs into the firebug he will fall to the ground floor and have to start again, while smoke is yet another danger to avoid.
Instructions are adequate and the gatme is available on tape or 40/80 disc. There are freeze game and sound on or off options along with provision for joystick control.
J.D.

Price: $£ 9.95$
Pubilsher: Acornsoft
Address: Betjeman Hse, 104 Hills Rd, Cambridge CR2 ILQ


## Superchess

In order to test this program fully, I see th up in opposstion to Mikro-Gen's Masterchess 11 on the Spectsum.
Superchess allows you to set up the board to your own requirements, and plays on severall levels, each with a different response tume varying from pretty instant, to 24 hourst The screen display is very atceptable, with the board viewed from above. Interestingly, when left to it's own devices, each program produced the same opening moves on level 1 , though it was on level 3 that I tecided to play them aganst each other. It started out being fun typung thens rexpective noves thto each computer...

Musterchess took about 30 seconds to produce it's moves. Whilst Superchess groduced a move affer about three minules" thanking time, and that is the way it contunued. After three bours, I was bored to death. Masterchess on the Spectrum was just as quick, and Superchess was stall grieding away, At bedtme, there was no sign of a winner, so I swatched offl But one thing was interesting; at one stage Masterchess declared that Superchess had made an illegal move, and It appeared to be right - either that, or it had set it's board out incorrectly,

All the usual features are here; recommended moves, self play, analysis mode and insights as to how the program works. A handy feature for green sereen owners is the factiny to change screen solours. Acceptable, but rather slow if you want a real challenge.
D.M. Price: 99.95

## Publuher: CP Software

Address: 10 Alexandra Rd, Harrogate HGI 5IS My? 43
$0-5$


## Castle of Terror

If you like graphte advemure games set to spooky music this might be for you.
The cassete comes with three pages of insiructions although the precise objective is not given. 'What you do is up to you' says the blurb. As the title page shows a Dracula Cigure, putting a stake through his heart wouldn't be a bad idea

The adventure loads quickly and the screen has a hiresalution picture in the top half wall your input and lext replies at the bottom. One Feature is it's English style mput. This adventure allows you to enter "vocab' to see a list of verbs accepted by the computer. However I don't seem to have the knack of communicating in pidgeon English. When I enter "knock on door the computer responds 'You do not have it' adhough knock is in the vocab! I therefore tend to have many inane conversations walh the compputer.
The usual adventure commands are provided, look, anventory, examine etc. In addation you can call up the number of moves you've taken and your score and you can quat and restart the game at any stage
I think keen adventurers would get several hours of ganang out of Castle of Terror. The graphucs are good, there are appropriate sound effects al certain stages and some of the characters are ansmated.

Price: $£ 995$
Publisher: Melbourne Hse
Address: Castle Yard Hise, Castle Yard, Richmond TW10 6TF


## Batile for Midway

Wargaming is a highly respected and long established tradusomal boardgame. Usually, a real wartime battle is refought, but of course, the oulcome can be different. The problem is that you need someone to play wuh. PSS has the solution here which appeats 10 stack to the traditions of the game, whilst adding the sophustication and facilties of the home mucto, and a very devious partner!
Once loaded, the map of the battle zone is shown in multicolour. On it are shown the American defenders in the shape of two task forces, plus the base on Midway with il's autrieid, and two scarch planes. A large eursor can be moved abouk the screen and when posthoned over \& unt, : report on stalus can be catted up. Addtionally, if there are planes, they can be launched or landed. On the learnung level. some helpful dolted lines show the route of the Japanese.

By moving your cursor and punchang keys, you can get your planes to search. When the Japanese are eventually discovered, you can see them nodicated. You must then saunch your atiack... if they don's wipe out your autlield firss!

When an altaik is launched, the screen displays the scene, and ammated arcraft and ships do battle royal. You even join in using your gunsight and joystrek! Afterwards you count the cost, and of you happen to have left your planes in the air too long, then it's curtans for them... and probably for you'
Super graphics and sound.

## Great fun.

D.M.

## Price: 5995

## Publisher: P55

Address: 452 Sioncy Stanton Rd. Coventry CV6 5DG


## Allen 8

It has to be admited that each game Ulitnate bnngs out is rather specisl. This is, of course, no exception and really has to be seen to be belteved
It isn't that the games are so orginal or that they are such good games and cry out to be played again and again.
This game is based upon the popular Krught Lore formal and has you movine a small. cule robol in a 3D landscape whel is the interior of the space ship. Your massion is to kuep the human inhabutants alive durng thene cryogente suspensibm, find and recovor the thermolee valves and make sure that all the humuas are alve and in the right condition to be able to land the ship.

To slop you there are a host of difficultes, including trap doors, plungers, eyg shelis, moving floorways and auen guards.

The games lack a litte colourt in particular, it would he mece to have the varicties of nasty idenufied in some colout, however, this formula gives you the extra problem of having to identify the masties before they pet you

The slisn's speed of movement varies with the number of moving objects on the sereen, but this doesn't deiract from the enjoyment. I was a litte disappornted about the inslructions, which leave rather too much to be discovered for my liking. Still a winner though
J.B.

Price: 5995
Publisher: Ulumate Play the Game

Address: The Green, Ashby de Ia Zouch, Leics LEG 5JU

 successful your board of directors wall expect even greater thengs of you. Your job as manayng director seems to be a one-man affas. As well as starting new products you also have to sort out launch, advertising and progress whilst dealing with the management of the sales and development Along with your financial worrnes it's enough to give you ulcers

The instructions to the game are adequately ser out on the insert to the casselte. Unfortunately it's not a last loader, so It's a case of setting fot loading and having a cup of tea.
Once loaded the graphics consisted of pages of scripi about the state of play with the occasional graphs. The highpoint of these is games chart, where you can watch as your game or games chmb and hopefully trigger the No I page reach the pinnacle of software startiom. Sound is practically non-existent. Overall the game is fun to play a few times, but not as addictive as the package would have you believe. M.W.
price: $£ 795$
publisher: Adductive
address: 7a Richmond Hill. Bournemouth. Dorset BH2 6JE


## Stockmarket

A financial game. After an age of loading in the slow mode, the screen clears to show a representation of a terminal screen. complete with $8 \pi$ accoustic modem on and through which you recetve your financial gen.
You start with £IOOO, and by careful buying and sellugg in four types of mining shares gold, lead, tin and zme - you can make or lose money as their prices vary on the market. If you run out of cash, you citn acqure a limited loan whish must be repaid in 10 tutns, plus interest at the gong rate.

Other forces are al play however, as a rather splendid rendition of a lime pronter shows at the foot of the screen. Sell a bundle to buy into gold for example, and before you can lay a hand on your shekels, the taxman leaps in and grabs his share.
Up to six players are catered for, and the alm of the game is to make a multion first. Playng on yout own tsn't much fun, and whist playng with a fruend is better, it still tsn'l wildiy excuing

Perhaps thes is a result of a lumited number of randoni forces at play. Once you've had the attentions of the taxman, and watched the market vary, you've about seen the 'lot Don't expect a quick result etther. We played for over an hour, and in that tume 1 only amassed 5655,000 - chance would be a fine thung! D.M.
price: 88.95

## publisher: Amsof

address: 169 Kings Rd, Brentwood, Essex CM14 4EF



Roland Goes Square Bashing
This is an absolure gem to which the inlay card with it's dubrous spelling doesn't do justice!
Imagine taking one size of Lego tule and using lots of ties, building up a series of structures by makung linked steps and platforms which twist and turn round and upwards. Each succeeding structure is more complex than the mext, wih turns and holes which are invisible from a viewing angle above and slightly to the side of the construction

This is what you see on the screen, but in glowing multcolour and 3D! Using keyboard or joystick, yout must gatle Roland, who had metamorph osed unio a cubic litile chap with arms and legs, up from the botiom to the top. Beware, however! Even whilst he is standing on the tile, it begrits to decompose, and if you wall a fraction of a second too long, the Juckless Roland plunges stylishly down behind the lestering at the foot of the screen 10 oblivion

The first few screens are farly easy, but after about seven, the going gets really fough! You have to be very quick and clever to suss out the best route. At least you casp practise, because access to any level is built m , as is a hagh score routire
I liked the concept, the graphes and the sound, and found this refreshingly different challenging and addictive. The milay card and mstructions let it down however. They don'1 describe the game adequately. Highly recommended, though pricey.
D.M.
price: $£ 8.95$
pablisher: Amsof
gddress: 169 Kings Rd, Brentwood. Essex CM14 4EF



Tifan
Titan is a machtne code utultey/ development program of the type generally referred to as a montor. This allows you to examine code already written ether by yourself, or, indeed, by a commercial programmer.

Shighly smaller than 5 SK, Titan can be loaded almosi anywhere in RAM allowing you to examtne non-relocatable code to be run in the area for which it was written. Once the two are loaded, you acivale Titan by a USR call. The display in command mode 15 of the 'front partel' variety which shows the current state of all the 280 registers, what they conlatn, and what the address in memory pointed to by the register, contams. In addition, there are four 'Windows' on memory which you can define allowing a conslant 'peck' into the areas used by your program Flags are also displuyed.

Instructions for drivigg the program are comaned in the accompanymg manual, and a brief run down of the commands is also given on a reference card; a good idea this, since there's nothing more frustrating than to have to dive into a complex manual in order to find a single cormmand Having said that, thas is not really a package for a beginner You must understand the principles and language associated with 280 code in order to use it, and be fluent in hexadecumal notation.
Given that, all the usua, facilaties for disassembly, searching, modifyng and single stepping are here, and oulput can be directed to a full size printer.
D.M.
prlce: $£ 10$
publisher: Tonorrows Dream Software
address: Richmond House, Ib Sydenham Rd, Cotham, Bristol BS6 5SH


## Byte Bitten

Strange name for a game, 1 thought, unall I realised that thus is a game about a game.

You play a computer-addicted chutd who has only one thang in mind, the playing of computer games. In a scenario that is probably just a little too close to real for some familes. the young player has first to do chores before betng allowed to play the game

This game is therefore a fusion of two games in one. The first part unvolves the chores beng done and is based around the maztesearching idea. You explore the rooms in a house and have to find the righ object to do the chosen task,
Unfortunately the identification of the objects is rather difficult. For example, decora ting involves the collection of a picture representing a flower on a roll of paper - at least that's what I guess it is

If you manage to remeve the correct object then you are allowed to have a game on the computer. The game concerned is a helicopter shoot-and-kill patnic You take off from the anreraft carrier and then destroy as many of the enemy as posstble before landing to refue!
There are a couple of dificultues. Firstly, the radar screen has each helicopter plotted as a single dot and you tend to go a little myopic just looking for them. Secondly you can't change speed to overlake the nastles.
The price forgives all of these problems though. J.B.
price: $£ 2.50$
publesher: Fireburd
address: Wellıngton Hse, Upper St Martin's Lane, London WC2H 9DL


## Buggy Blast

This is one of the best of the blast-everything-in-sight games 1 have seen for a long tume.

What makes the game so remarkable is the quality of the graphes - the most colourful and unteresting I have ever come across for the Spectram.

The story is farly easy to understand: you are trymg to kili 20 of the enemy aliens before your buggy is totally disabled. You have two types of weapon - twin Photon lasers which you control with thekeys or the powerful Xion Phaser whach we used to call smart bombs in the days gone by There is a large store of photons for you to use but you've only got 10 Xion Phasers for the enture mission, so don't waste them

The 3D trench along which you are traveling is reminuscent of Staf Wars, but there are a whole range of different types of enemy to combal. Some cmerge from sude doors, some hover in front of you and some are orbtting above the planet. You are warned of the approach of the orbs as they can be deadly and finsh the game if they hit you just once.
The best graphics are shown when you are docked and ready to take off again. The use of colour and flashing is excellent. Sound is used fairly well too and the controls are responsive The instructions are excellent with plenty of details, but the greatest omussion is the joystick option.
J.B.
price: $£ 5.95$

## publisher: Fireburd

address: Wellington Hse, Upper St Martin's Lane, London WC2H 9DL



It's only fatr to warn you that this review was writen by a scepteal, anxious extrovert who shows no evdience of exirasensory perceptiveness! if you already suspected thus, then you may well be interested in thas package

Via a series of questionnatres, your recepiseness to the idea of psychic abiltty is assessed logether with some aspects of your personality. Following this, a second program is loaded which will then glve you the opportuntey to relax by symcinonusing a pulse with your heart rate, and displaying some patterns to watch on the screen The computerised pulse gradually, almos! impercepubly, slows down, and your pulse rate should follow.

You are then ready to take the test5. You may either play guess the playing card, predici the colour, and two grid games where you have to locate enther the smilng face or the hiddent submarine. You are encouraged to do thes 50 times for each option in order to produce a result of some stalisaical signilicance. Having done so, an analysts of this sugntifance is given, as is the opporturtity to save the results of your test to tape. You are encouraged to use the games often as the accompanymg manual assures that practice improves performance.

Though wrtten in BASIC. the standard of programming and screen presentation are excellent, quite a joy to behold, though the patterns used for relaxation are spoiled by altribute problems on the Spectrum's screen.
1 don't beheve a word of 11 but then you know what 1 'm like... don't you? Pncey! D.M.
price: 595
publisher: Mirrorsafi
address: Holborn Circus, London ECIP IDQ


## Demons of Topaz

This addilion to the Firebird Gold range is a space epre from down under, It's the ambrion of a young Australian space pilot called Ozzy to travel the universe. To achieve this ambilion Ozzy musi first visit the asterold Topaz and locate the seven crystals of Top:17 These will provide his old ship wilh suffecient power to warp it's way from one side of the universe to the other

Moving around the asterod's surface causes the screen to scroll sideways in the approprate direction. Holes are to be found at regular intervals on each level, stepping into one of these allows Ozzy to descend furiher into the asteroid. There are eight levels in all. When uside the asteroid Ozzy doesn't wear his space sult and so you must keep a close eye on his oxygen level. By relurnisg to the asterond's surface al reguar iniervals Ozzy's oxygen supply can be replenished

The aslerold contallis many Mantc Miner-style hazards, eg dissolving floors and poisonous plants. It also contans the puardians of the crystals, the Demons of Topaz. These nasiues don't awaken untul you have found the first crystal, but when they do you are in for some fun. Fortunately Ozzy brought along his Trrang, a high-tech development of the boomerang. Skilful use of this device keeps the demons at bay.

For one of the Gold edition thiles, I was rather disappointed with the lack of detisil in the characters. The ammation is sluggish and the musteal introduction must have been written by a tone-deal wallaby.
J.R.
price: $£ 5.95$

## publisher: Fireburd

address: Wellınglon Hse, Upper St Martin's Lane, London WC2H 9DL

 out with the maze occupyng the major portion, a communtcation window across the bottom, and an illustranion/ puzzle window top fight. At the start, a finely drawn, mysterrous looking house is tevealed, and the solution to three puzzes allows you inside.

You are then shown as a tuny anumated stack man at the entrance to the maze. Usmg cursor keys or joystick you steer towards the exit, but you're unlikely to gen fur! Seemingly independent of your location, your path is barred by a number of obstacles. The Egotistical Ciorilla demands you spot and remember his name; the Mad Mathemasician - aren't they all? - requires some mstant arithmelic; the Stake Pit, the finding of a ladder: an unpleasant looking gargoyle setra e varsion of Hangman, ant given the chace of three doors, you're bound to choose the wrong one! There are more, and each tume your fail, it's back to the begunting agun. This is level I!
A goultsh mosophone ture accompantes the game, which. With the exception of picture wandow uses very small graphics. Visbble on the greenscreen, they almost disappear ustng the colour modulator. The major pletures are, however, quite classy.

On tape, the game is saved in normal and speedwrite modes, the first l've seen. Doubly sad therefore to report that the quack version wouldn't load. Overatl, only adequate; sbout the standard of a 5199 Spectrum game.
D.M.

Price: $56.9<$
Publisher: Sond Software
Address: 35. Melville Rd, Buspham, Blackpool FY2 9JF


## Upper Gumtree

Richard Shepherd acheved success with Urban Upstart and this game will do his reputation no harm at all. This huge adventure offers a hundred focatons, many illustrated in multscolour mode.
The story lome is original and most amusing. Professor flownovitz, wather eccenters bluke, has moved into the manor at Upper Gumtree. Whh him he brings a farge number of strange devices. Afier some itme, buzarre things start to happen and linally the mad Profersor delivers has ultamatum. Your laski is to save the earth from his liendish machanatsons. To axsist and complecate your task, you encounter sundry people including the heipful Emma and the kelptomanac Waily.

The standard of programmang is very high with rapid graphics roulunes giving good quality pictures. Raster taterrupts are used to give both text and pictures to good effect. The textual descriptions are nice and detasked and better than moan I've seen. Many of the accepted techniques are used tncluding a real time element even the colours of the pictures change as nught approaches. The interactung characters have a degree of artificial intelligence

The game is full of amusing probiems and interesting ways to die. In all the atmosphere develops well and tis easuly holds one's interest. To make thungs less tedious, you can select the speed of printung, and disable the graphses. The parser is quite flexable and allows multiple commands.
Overall this is an excellent game at a very good prece, wel. worth close examanation. M. W. Price- £6 50

Publisher: Richard Shepherd
Address: Elm Hse, 23-25 Elmothott La, Sloug̣h, Berks Eh

## 4 Minute Warning

I suppose it was inevtable, and here it is - propaganda by softwarc. Thus is not a polttecat Judgement, merely an objective statement. The CND logo features on the loading screen, and the instructions pornt out that we have the luxury of a four minute warning th the face of the nueleas holocaust

In the guise of a maze game, you then have four munues real tume to steer your little man about the screen cotfecung those things needed to survive in your falt-out shelier. Not surprisingly its difficull, and you fail. You are then confronted by a sercen message when makes the assumplion you voled for Margarel Thatcher, crucises you for it. then appeals to Reagan not to push the button?

The graphis standard of the game is samolarly crude; no provision for joysuck, oversensituve response to heys, and gerky movement. I suspeet the progema is machune code assisied BASIC. As a game, 1 found it bormgit perhaps the standard of a magazine hstung of a year ago in terms of sophsticalion.
As propagande it fals too. being far to0 overt. The best propaganda is subtle, and had the authors wanted to actually achecve something in this respect, the concept would have made an deal vehtele. Happily, they went over the top, and we can see this for what it is. which makes me ask, If il's so abvious, who's gaing to buy 11 2 n vew of at's shortcomings as a game? Is it just to confirm a political conviction? D.M

## price: ES.(0)

publisher: Mataration
gddress: 47, Clifton Rd, New-castle-upon Tyne NE4 6.KH



## Arcadians

Arcadans was the first Galaxam game released for the HBC many moons ago and it's sill the best one around it has now been converted for the 1 lectron ant is as demanditig as Clter
( dmotan was the logltal pragression from spact minaders. The omtnous cloud of ahens is retansed but they are now allowat to induige in dive bombing tacties. This minor modifisation to the gutne mereases the level of diffiedily ren fold, I wouldn"t bother looking for the safely of your shelds euther, you don't get ant it Arcadians.
These are four separate types of alicn, each havang tits own surrige tolue Ht a visp whal.
 A's sconng value is doubled. The value of the command shyps, when hover above the mann squadron, can vary. These shaps normally attack in congunction tith two scout shaps. Should you take out the two scoul ships before destroying the command ship then it is worilh i whole $8(0)$ points. However, you will need to practise quite a white before beang abie to pull off that stume wth any regularsy.

The syatem emplayed to display the score is one of the best I have secn on any game. At all tumes durng combal the Whater', score and position in the hu-score table is dusplayed, ffom posikion 30 upwards. Thas addls to the tenston as you wach the points click up towards the number one slot.
If an accurate reproduchon of a ciasste arcade game is what vou are looking for then Arcadzans fits the bill.

## price: $£ 9.20$

publisher: Acosnsoft
address: Acornsoft, 4is Market Hill, Cambidge CB2 3NJ



## H.E.R.O.

Now don't ask me what the initials satand for because the character in the game is called Roderick Hero with no full slopst One other polat bothers me and that is the sereen pecture on the packaging: For once I thunk they are underseiling their product because the graphics are amazingly good and don't appear in that block panted fashton that you see on the cover. is this a first in promotional humulity?
The game puts you in control of Rodertck who has \& proppack to hover withan underground manes, You have to rescue trapped miners and watch that you don't run out of power.

Armed with dynamute and a microlaser beam attached to your helmet you have to blast your way through walls and kill off any nasty creatures lurking in the depilhs.
Wuth a little practice, conirol becomes easier using either a joystick or keyboard. The menu offers the chooce of five startung levels so you can miss some of the earlier easy scrcens.
Poinis have to be earned but an addulional enticement in the unstructions suys, "The rescue operation is complete when the Hero knows .." Needless to say I haven't got anywhere near that but l'd like to hear from whoever does.
An excellent game that had good graphics, a chance to progress and a great deal of variety - did I mention the lava nver and rafi?
M.P.
price: 111.99
publisher: Actuviston
sddress: 15 Harley Hise, Marylebone Rd, Regent Park, London NWI SHE



## Beamrider

Thus is a very superior space mvaders. But I'm a sucker for the zap-"em-up type of entertamment particularly is it's got - touch of noveliy

Activision has created a varnely of ahens, mine plus a mother ship, who swoop down at you on a grid. kn each sector there are 15 whate enemy saucers to oblaterate and various others 10 avold Progressing through the sectors makes life increasingly difficult but if you acquire the experise or smply feel sulcidal you can go for the higher leveis by chouce.
For me the star feature was the sound effects which accompamed the starl of each sector as well as the fise and falfi of power surging from your main weapon - ithe laser lanats. Other appropriate sounds were used to create an intense atmosphere which bighighted the action.
The menu at the start offers the game for up to four piayers Ore peculiarity with Actuviston's games for the MSX, however, is that there is always a keyboard version which is never mentioned in the insiructions -1 played this one quite successfully using the cursor keys and space bar Joysticks are therefore optenal
The graptacs are excellent and this game is a plece of pure escapism that caprivates in more ways than one. Even the gnd comes racung down towards you to give that 3D allusion of drawing you into the screen.
M.P.
price: 11199
publisher: Activiston
gddress: 15 Harley Hse, Marytebone Rd, Regent Park, London NWI SHE



Battlecars
Bautlecars us a real conundrum. Set in a tume in which road travel is so safe, people have resurrected dangerous racers with the added fun of missiles and guns. You have the chance to select or design your car with a host of features all to help you win against the computer or a friend. The process of selung up the game is explaned none too clearly in the manual, and ambiguous on-screen prompts don't help much

Once you have done so, you can select the seting in which you race, circult, cify or autodrome. This is where your problems start, as each is a separate block of code on rape. and no Mscrodrives to help! A crude and Mackery display shows your progress round cach of the courses if you can manage to make any. Though keys are assigned for play, there afe sux for sieenng and more to control the weapons, no provision ts made for joystucks. A small card overlay is provided for keyboard control usink Iwelve keys in all for each car. Fven so it's not properly labelled, and won't fit the Spectrum + or add-on keyboards
As a result of all this, it's hard to understand, hard is play, and not very rewarding to watch, hence the conundrum. If you are clever enough or old enough to understand how to make this work, then patient enough to practuce the very complex controls, will the game be sufficiently satusfytng once you get to play it?
D.M.

## price: $\mathbb{E} .95$

patulishers Games Workshop
*ddresa: 27/29 Sunbeam Rd, London NW10 6.JP



An arcade game for the CPC464 featuring the current brggle, the helwopter.

You manoeuvre it round the screen collecting bis of a jet nlane, and placing them down in the bottom right frand corner. As you do 80, a jet begins to take shape at the top of the screen, and after complettg one, you start on the next. The brts noat down from the top, often landing on a vanety of platforms through which it appears you can Лy from below, but land on from above

Sounds simple? The complicanen is the there are aliens, a different type and shape for each level, which get in the way. You can, of course blast them away, and when you succeed in making one complete plane, the ahens change and become more attentive
Sound ts adequate: a reasonable engine noise and laser zap. and the graphes are quite meventive, though if you have seen afew of this type of game. you will soon reaise that the is the same plot as Jet Pack from Uthmate for the Specirum. As the Amistrad is graphscally more sophisticated machine you might expect them to be supenor, but they aren't quate as good. In my opinion they have netther the detail or the ultra-smooth movement

The bonus here, however, is the proce. At $\$ 2.95$ cheaper than the Amsoft games thus 15 excellent value for money and thus worthy of a place in your collecuon.
D.M.

## price: $x^{6}$

publisher: Interceptor Micros
address: Lindon House, The Green, Tadjey, Hants



An adventure game with some graphic illustrations, Heroes of Karn takes you back to a medreval/magical/mystery setting in a mythical tand, The sletve notes make all clear

You are the stranger who must defeat the hordes of Evil, mastermunded by the Powers of Nught. Only you can rescue the four Heroes of Karn, returmmg the land to peace and prosper. ny. In fact, the sleeve notes bo much further in selung the scene in 'mock-gothic' prose. Instructions for playung the game are very detanled, but they don't get you far with your quest!

There are about 10 illustratoons to accompary the game. These are revealed the first tume you encounter a location, but after that, you must specifically ask for them. They really are quate magnificent; 1 always worty dbout quaiky when I sec that a game has been converted from the C64 for the Spectrum, but this conversion is good, not simple lane drawings, but real pictures drawn in atrice on the screen.

Thankfully, ths is not one of those adventures which kills you off in the first three seconds; you get a chance to explore and collect a few bots and pieces before your troubles start! All in all, chaltenging. well executed and good value for money.

To discover whether it's the ulamate challenge, you'll have to try it for yourself! D.M.
price: ${ }^{5} 5.50$
pubtisher: Interceptor
address: Lindon House, The Green, Tadley, Hants

Pape 16 HOME COMPUTING WEERLY 12 March 1985


This is one of an enormous range of programs suted for . vanety of computers and is an attempt to give prachitonets of astrology the means to make the complicated calculations of relative posiuons of planets etc at the time of the subject's birth. Other programs in the sertes will draw the relevant charts and make an analysis, but thas confines uself to the calcutations on which the interpretation is to be made, and also includes some teachmg programs to get the BASIC key words and their meanings stuck in your head.

I'm not qualnfied to judge the accuracy of the calculations, 1 must therefore accept them The siandard of user-friendi ness is another matier. Considering the clam that these programs are exported, the results are excructating. Screen prompts are minumal, and if you manage to evade the unput error trapping, which is quite easy, the machine crashes. Although the maths is done quickly, the results are squashed up on the screen, in a slighly different form to that examplified in the detailed accompanying manual. You do have the option to use a primter. though, it would appear, only one which responds to the COPY command
The level of interpretation based on the manual is very crude and the teaching programs don't really help. All they do is present names of planets and attributes to be learns, then test you on your learneng
Very expensive, and very crude from a frendingess point of vew. D.M.
price: 111.50
publisher: Astrocalc
address: 67, Peascrofil Road, Hemel Hempstead, Herts HP3 8ER



From the name, you may have guessed that this game has a circus theme. Having played in. I had thought that il was completely original. I have it on good authorny, however, that it Es a copy of an arcade original That may well be so, but it is an excellent copy

You control a clown called Barney and must complete four tasks or acts. These can be underiaken in any order and have four different degrees of difficulty.

Task one mvolves walking along a lught rope and jumping over monkeys or through hoops of fire. Falure to negondate these looses a life. In task Iwo you must tecover balloons from t system of platforms and ladders whule avoiding a bouncing balt and the circus strong man. You get about the screen by jumping between levels, using stars and fallung down holes.

Next you must negotuate obstacies whilst rading unicycle, thas screen is essendally the same as the first screen. Finally, you must recover six keys by using trampolınes, trapezes and avording fire breathers. All screens require accurate timang and patrence.

The graphucs are simple but highly effective wath different scrolling and applauding crowds. The anmation of the characters is both amusing and skill ful. Four background tunes are used, all well arranged and with a circus havour - loved the Monty Python plece!

Overall, a fung game which is testing and addictive. At the proce this game is good value and is well worth a look. M.W.
publisher! Interceptor-Micros
address: Linden House, The Green, Tadicy, Hants



This game is essentally Star Trek but offers furious action, bnllant graphics and sound elfeets.

You are tasked with protecting the planel Jaraloba from the attacks of the enemy forces of Gorgamior. To this end, you patrol an area of space destroying a number of different types of enemy ships and their Base Stars. Throughout the game, you must nurture your ship's resources and return to your home bases for repair and refueling
The display gives you the view through the front scanner of your ship. A superb feeling of forward motion is given by the stars and other objects as they zp towards you. The top of the screen pives a constant record of the ship's status. You can review the status of the universe by dipplaying a Steltar Girid This gives the current distribution of enemy ships th each guadrant. You also use thas grid to move to a specified area

Combat is depicted by the vew of enemy shups coming towards you. You have a sel of cross haurs to aum your weapons. The different types of enemy use different lactics and are quite hard to shoot.

There are many other inter. esting features which I will leave for you to discover. The strength of thus game is il's excellent use of sound and graphics - not just in odd arcas, but throughout the game,
Overall, thes is a brithant game which is absorburg, tough and addnctive. At the price, excellent value.
A.W.
price: $\$ 9.95$
publisher: US Gold
address: Unut J0, The Parkway
Industral Cemre, Heneage St, Birmingham B7 47Y



## Paddington's Garden Game

This game should appeal to Paddington Bear fans and may еven cause Paddıngton to gam a few more.
You move Paddington through a series of gardens catching butterfiles. The gardens are th the form of a stmple maze made up of flower borders. The rlowers are porsonous so Paddington must not touch them. Other thangs he must not touch are the hedgehogs that run around the gardens and the wasps.

He had three lives to catch as muny butterflies as possible. The butterflies have names and at the end of the game they are all released

The cassette has a fast toad feature and the game can be played from keyboard or foystick. When the game has loaded you get some screens of instructions and away you go. Also included is a poster of a garden. I don't think the garden tayout on the poster is related to the one in the game although there is a loose resemblance.

I enjoyed playing this. The garden layouts are not too complex but the graphics are mice. Each garden has one or more exits that take you to other gardens and if you're lucky you may come across some marmalade sandwiches which earn bonus points.

The highest score logether with the player's name is displayed on the screen so smple compethions can be organised. This is a good value game that should appeal to the younger user.
L.C.
price: $£ 6.95$
publisher: Collns Soft
address: 8 Grafton Street, London WIX 3LA.



## Tower of Despalr

1 t's an advenure folks. with you cast as the Wartior-Mage of Castle Argent, summoned by the Wuzards to destroy Malnor the Screamung Shadow - come back mother in low, all is forgiven! No but senously...

This medieval fanasy $s$ fulty created by peading the accompanying manual. The background to the slory, the setting and much more are found here. Apparently, Malnor was prevtously defeated but must agatm be challenged by the reuntung of the gold and silver gaunters, only one of whuch you hold, You must find the holder of the other. then Journey to the Tower of Despar and fight it out.
The game, wrouten with the Quill, fills both sudes of the tape and sounds very complex. Untike olher adventures. however, you tre given map of the whole area of play Quilled adventures are, of course, lext only - but not this onel A finely designed character sel is featured on the screen, but the itlustrations are in the form of exceilent line drawngs in the manual. These ment very close attention as visual clues are to be found here. Not only that, but you actually get plans of the castic in which you start.
Irontcally, although all this information is provided, there's still a very tught lipped attitude to the commands and features of the program, so there's still plenty to find out. You do get a chance to get started before dying too! Different and chatlengung, though not perhaps an adventure for first tumers.
D.M.
price: 17.95
publisher: Ganes Workshop
address: 27-29 Sunbeam Rd, London NW 106 JP


## D-Day

D-Day is not so much a game as a sumutation. lu's complex, and features a map of the battle zones, meluding disposition of both Alled and German troops and weaponry. It is thas map over which the screen window scrolls.

Play aganst the computer is impossible, you need a friend, and you can choose which of the battic scenarnos to use: the landing, breaking out, to Arnhem, Arnthem invasion Fach of these has to be loaded separately from tape, an obvious use for Microdrives, but no provision is made for them. Though you can ask the computer to deploy your (roops for you, it's clearly better to sort it out yourself, dt does take tume however. Via a complex sel of cursor keys you can then manipulate your forces accordmis to an overall map whech can be called up at any time.

A vast amount of informathon is avalable about the different types of troops and weapons, together with ther readiness for battle, the type of terrain and so on. Through the computer you must unload trucks, bring supplies ashore, including tanks, fight and fire. Athough the manual goes into detan about all this, it's hard to understand, and in places doesn't seem to make sense.
Graphically, although attractive, the screen ts crude, but this should not deter the hardened war gamer at which this package appears to be almed Certannly not for the arcade freak. A specialist may appreciate it even at this slughtly high prece.
D.M.
price: $£ 7.95$
publisher: Games Workshop
eddress: 27/29 Sunbeam Road, London NW10 6.JP

8PM,


Flipped


Hooked


## Keen



Yowning


Comatose


Six more new words this week to add to your growing list of RSX commands

This word is used to seroll the screen up by eight pixels (one line). The top line wall be "lost" and the bottom line cleared. No parameters are needed for this one

DROL!
The exact opposte! The screen will scroll down by eight pixels, with the bottom line being lost and the top the cleared

Both of these words use the same ROLL foutme - aval able on the jump block - the contents of the B register decride whether the roll is up or down. The words can be used for many purposes. The following example will produce a screen 'Judder' - useful for explosion effects in a game:

FOR $X=1$ TO $20:$ RROII. IWAIT,5 + IDROLL.
WAIT,5: NEXT
The length and speed of the shake can be changed by allerng the values for WAIT AND X

The next two words ZERO and MOVE deal with changing the contents of RAM. They are both powerful commands, but also very destructive if you are careless in spectifyng the values.

This will zero the contents of a specified number of RAM locations. The syntax for using ZERO Is:

IZERO, number of bytes, start address

For example, to clear the screen memory (which starts al \&C000) you woutd use:

IZERO. 16983.8C000
Notice how quickly the routine performs. It is the equivalent of POKEing 16383 locations with zero. Compare the speed of dong this in BASIC by

FOR SCREEN $=\& C O 00$ TO \&FFFF: POKE SCREEN. 6 : NEXT

Thes is a good example of the dufference in speed between machme code and BASIC $\angle E R O$ could aiso be used to clear parts of the screen if required, but it's main purpose was to zero blocks of inemory that are going to be used as buffers by vanous machme code programs or da1a

MOVE
MOVE is a very powerful word. It will copy $\mathbf{X}$ number of bytes from one position in memory to another. The syntax for MOVE is

MOVE, number of bytes, desInalion address, source address

Make sure you get the order correct! The source address is where the bytes are that you Whish to copy. The desimaljon address is where they are to be copied to. Any errors here are almost certain to cortupt enther your BASIC or machme code program or some other part of memory - with dire resulis!

MOVE can be used 10 relocate code routines provided they are 'relotatable' A machine code routine is relocalable provided that ans jumps to withtn that program are relatuve jumps ( JR ) and nol absolute נumps (JMP). Always use a JR instead of a JMP if possible as not only is it quicker but the progran will then, in most cases, be relocatable. If the screen memory layout of the AMSTRAD was more convenuonal, then MOVE would be very useful for moving pictures etc on the screen. However, due to the unusual screen tayout this is not really on.

Conying the whole screen to memory and recalling at later can be very useful though. Thus could be done as follows:

IMOVE, 16384 , 10000 , 8 BCOO
All 16384 bytes of screen memory are copied to localions

10000 to 26383. Be careful that the area you copy to is not being used by a BASIC or machine code program, or by the operating system or else the results will probably be disastrous. Try the above by copyng e sereen layout. Clear the sereen and then enter the following to re-display the original screen:
$\underset{\substack{\text { IMOVO } \\ \text { IOVE }}}{ } 163384, \& 6000$,

The anginal picture will be displayed in in fraction of a second. Be careful that the screen offset has not changed though in between saving and recalling the screen. Provided that no screen scrolling has taken place then the offset wal! be the same. This is much more hkely to happen when saving screen dumps on tape and toadıng them back in at a later dale

As you may have found, the pucture is displayed in the wrong position, unless you are very lucky. To help overcome thas the following two words will be of great benefit, plus they can be used to produce some very fast scroling.

To scroll the screen on the AMSTRAD an offset is used The actual scroll is then performed by hardware - so it is very quick. Two roulines are provided th the jumpblock to read and set the offset. They are

- SCR SET OFFSET (\&RCO5)
- Set the screen offsel

2 SCR GET LOCATION (\&BC
$\mathrm{OB})$ - Fetch the offset
These are both used for the following two words.

ETHIET
Thus will call the SCR GET LOCATION routine which returns the value of the offset to the HL register pair. Thus value will then be placed into the vastable OFFSET \% by using the following syatax:

1OFFSET , OFFSET \%

As with LROM and UROM the varrable OFFSET\％wall need to be declared first by using－OFFSET呵 $=$ f．This makes sure that an address for the variable is present，which is then used by OFFSET．To complement OFFSET we need a word to set the offset：

## 5BTOFFSE1

By foltowing this word with the required offiset value some very useful screen scrolling can be induced．The symar for SET－ OH FSET IS．

ISETOFFSET ，value of offset
Try the following to see the effect of changing the offset value：

FOR A＝ 1 TO 10000 STEP 500 ：ISETOFFSET．X ：I WAIT， 100 ：NEXT

Try changong the values for the olfset and Walt and you will soon realuse the potential．If you are saving a screen dump on tape or to memory，then you can now take a note of what the offset value is at the time of saving．This value can then be used to set the offeet when the picture is recalled，which should solve the aforementioned problem．

1 isurigs I and 2 give the full delauls of the machine code routines for these six new words．

The LDIR instruction th the MOVE TOULIne deserves a special mention．This is one of those powerful multi－putpose $\angle 80$ instructions

The contents of the memory focation addressed by the HL pair are loaded mio the memory location addressed by the DE pair．Boih DE and HL，are then incremented．The BC register patr are then decremented（by 2）．If BC does not equal zero then the instruction ts repeared For just two byies of machise
 SETOFFSET
code thas insuruction saves much programmung－see how many bytes it would take in 6502 machane code to do the same lhing＇
You should now have quate a （few words in your RSX．The BASIC lisung（listing 3）will enable you to prist out the words in the RSX word table． You can use the program as it is or tag it on to the program which enters the new words
Next week we start on some LOGO type words to help you get to grips with the Amsird graphics．Hopefully these will help to save you both tume and memory in producins those ＇special＇pictures．

Conmant
OFFSET


## SETOHFSET

## 如324 CP

FE 1
\＆R326 RPT NT
CB
：relurn of top parameter？
K8327 CALL \＆829B CD 9882 ；value of offsel to HL


## Listung 3．BASIC subroutine to lisl new words in RSX word table

## $2(x) 00$ ADDRESS $=$ \＆ 7 F8C $: X=1: W H 111 \times x \times 3$ <br> MMIn＝PI IKIADBKI Ciy ADDKLSS ADDRLSS＋





## Gofiware

1a. How much do you spend on software over a six-month period? 4

How often do you buy soliware?
Everyweek $\square$ Every month Rarcly $\square$
c. What types of software do you buy?
Adventure $\square$ Uthates $\square$ Husiness $\square \square$
d. Wo software reviews influence your buytng?

$$
\text { Yes } \square \text { No } \square
$$


Do you follow the Gallup chart?
Yes $\square \mathrm{No} \square$
9. Hardware and peripherabs
I. Do reviews in fluence your buyng?
ib. Would you lite to see more hardware revews?

e Do you buy man order Irom HCW adverts?
10. Booh revicha
b. Do you buy books aboul your computer? Yes $\square$ No $\square$

## 11 Home Computing Weekly

* Where do you buy your copy of HCW?

Regular order Fromshelf Subscripion $\square$ Compurer shop $\square$
b Do you ever have trouble getting a cony? Yes $\square \mathrm{No} \square$
c How many people read your copy of HC W?
12. Do you like the new look HCW?$\square$No
13. Wheh parts of HCW do you like best?
H. Which aspects would you most hike altered. and now? ._is . $\quad$. wurld you mosi lixe so see in HCW? -

Page 22 HOME COMPUTING WEEKLY 12 March 1985

This program by Tim Lang takes you in search of treasure on a desert island

In this game you play the part of a prate．Travelling around 10 desert islands you must try to find your treasure

Each island is different and more difficult than the last． There is a time bonus if you return quickly．

| How h works <br> 5 tcore subroultne <br> 10 wets cototits and bagh score， catls title ard instrustions subratatenes <br> 15 sets seore and leved to zero <br> 20 prints final score，program loops back to here <br> 30．30 call subtoutiaes to pront screen，detent adjacent object and print score <br> HiN－240 math anovement loop <br> H10 prinis as on screen and beepr <br> $310-3 \pm 0$ prinls final teore and offers athother game <br> $500-650$ rousine to detect adjacent objects and prast $n$ ： boltom of screen <br> 10100－1400 isaltatise und calculase co－ordtnates of all objects， pronts paims and cactı <br> 19010－2160 print tutie subrouane <br> $2140-2160$ date from cosle and UDGs <br> 4000－40da tune subroutine <br> Seno－SM60 instructions sub． roulane |
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 TD 11 ad







itho FOR h＝1 TD it






IIbs LET $\operatorname{C}$

II \＆b NEXT



1190 LET A




12才 LET GNE






1 相 FOP ח＝1 TD zel



I $\ddagger$ 啫 LET
14BG RETUNN
IGQR REM BATA FOR H／CODE

，35，11．126，177，32，245，201，6
20연 DATA 29，136，154，124，24，29，24 ，54
2B1R DATA 129，66，36，24，24， $26,66,129$



v5e DAtA $33,36,36,36,40,6,8,2 B$
2ab DATA $32,54,62,20,34,37,64,128$
978 DATA 28， $62,42,62,28,99,28,99$
206 DAFA $24,124,222,247,109,251,11 D_{1}$ AD


2110 DATh 24，235，126，126，24，255，126，126，24，153，255 － $255,255,255,326,68$
 2.249
 ＋nl，Wi NEXT $n$



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Page 24 HOME COMPUTING WEEKIY 12 March 1985


Press, this introductory database comes complete with three sample datafiles, a fite copy program, pronter file and Picfile itself. Thus enables datafiles ereated on the re-vamped Factfile to be displayed as bar charts or scattergrams and greatly increases the versatulty of the whole package.
Children can extend their thinking skills and become active interrogators - asking awkward questions comes naturally to them. A further inducement is the avalability of Picfile on a seven day trial basis pake the risk

## Most deplorsble program

Unfortunately this award could take up the whole page as there are so many educationally poor programts vying for your money. I've restricted it to three competstors.
Ginn publishers wha on the grounds of havias the most expensive boxes un the business. Software seems to automatic-
ally double in thus blue packet.
The other two wanners are really a parents' gunde to evaluation. Any package with the Regonal MEP (Mictoclectronics Educatıonal Programme) symbol on it should be viewed with extreme caution, as should software dealung tn tuks and crosses as display features. Early Reading Skills, a hybrid from MEP/ESM falls quickly moto thus cavern. Beware, you have been wamed.

## Best software house

This was a close run contest, which is surprising. Most producers of educational software can almost selfdestruct their own reputations. 4Mation ran a close second. All the material is tested thoroughly in schools before it reaches the shelves and the standard 15 extremely high. The winner, ASK, is a company whech is equally concerned about the chaldren who wall use the products.

There is a larger library of programs from whech to choose and a consistently high degree of quality within all the products. Not only doss ASk market Podd, but other favourites uncluding Facemaker, an easy to use identikit program, and Number Gulper.

## Eest smaintion

Archaeology, by Cambridgeshire Software House, is an open-minded simulation straght from the stabie which produced Expedition to Saqgara. Thes program can be used in any location - even your own back garden. Using an 80 x 60 gnd , chuldren draw up a sute plan from which they, or other explorers, will lates excavate. First you enter the walls on up to three levels, then the floor areas, and finally the artifacts. Through an easy to follow menu, children can then explore the site over 1 period of tume. One drawback is the omission of a sample file, bui
the documentation sets the scene well.

The possibultites are endless, it could be used to monitor the progress of a reluctant gardener over the years of sweat and tol in the battle with the weed.

## Hit of the year

This has to be Podd for sheet brillıaлce. A лол-vılent, non key-bashing, non-ear plercing program for all the family, and educational to boot.

## The futare

The software scene has changed rapidly over the last year. Over the next 12 months look for two things. First, software that is more open-ended and can be adapted to many situalions. Secondly, software that has been lested in schools before marketing. Sensible soltware houses will advertise the fact.

Happy computing - a home or school.
J.H.

## FLOWERS OF CRYSTAL

two part adventure, mitroductory dramsined audio story, work them. utility, map, supertiy illustrated itory book(et, teccher's munusi)



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 Backpackers Gulde
to the Universe
Ventures is back, in strons form as always. Step with me into the wortd of adventures and arcventures (arcade adventures). This week I shall be looking as Hellfire, the Melbourne Housc game first seen at the PCW show last September: Spiderman. from Scoll Adams; and Fantasy's spectacular Backpackers' Gulde To The Universe, But first.,.

## Opialon

Adventure games are getung stuck in a rul. And if they don't move out fast, they might die away all togecher.
What do 1 mean? Weil, they're blighted with lack of orignality. The rumber of tumes I have revewed games sel in far-off lands, where wizards are wise, damsels distressed. dungeons numerous and Urg monsters deadly, is lar too many. Even as I write, they are still roiling off the keyboards: Kentilla and Sorcerer of Claymourge Castle are some recent examples. Some adventure addicis will clanm, admittedly with some jusul斤 callon, that each game has it's own subte differences. Bul to Joc Public, or even Joc Public's distrobtor, they all look the same. Which means nether the public nor the shops will buy.
Of course, there are other themes; but these too are cliched. Outer space, nuclear holocausl, haunsed houses, pirates, spy games plus a farr number of time travel games. are alt well covered. But hutlc else is released. Why? There are so many possoble fietds for development - after all, advenlures reflect life. Only occasionally - wnth something like Úrban Upstart, Macbeth or Sherlock Hoimes - do we really see orignality (and look how well they have sold)
If the companies keep churrang out the same gannes. only the very good, like the Level 9 games, or the very well advertised, like Kentlla, will survive. Which is a shame. In this tople, The Quill is both a gift and a curse: it gives
ordinary people the chance to wnte games, but they all turn out the same!
Areventures aren't suffermg as much since people seem to be more expermental. But even so, there is a limit to how many Manic Miner games the public can stomach
So, software compantes. thunk ongmal!

## Reviews

First up. Melbourne House presents an arcventure callied Hellifire. Someone once sard computer games run in cycles, and so they do, as here we have another Greek game, hol on the feel of Giff From The Gods, b) Ocean. As Ulysses, climb the stopes of Mount Olympus. avordung falling boulders and the deadly Gorgon, outwit the Minators in the Temple of Knossos, and shoot the repulian acsassin and fireball ihrower in The Maze. Oh well, at least it Isn't as complicaled as Gifi From The Gods.
My first moan is that the apparent screen sho1s on the back cover aren't the same as in the game. They appear to have been 'touched-up' with colour, giving a masleading umpression In fact the first screen is almost entrely black and whte, rather drab. and resembles an odd Kong game as you bounce up the hitlocks.
At once, you notice the lack of sound - there isn'l a beep to the game. Things are little better by screen iwo. Here strategy is important, but once a roule is worked out any fun $\mathrm{d} w$ Indes. The final screen is worse. It can hardly be calied a maze: one screen in size, and in large 3D. Thls task is scandalousty sample. Once completed. you relurn to screen one, which is now harder.

Graphecs are reasonable, bul the screens take a bititic while to be drawn. Anmation is quie good. In general, this game is a disapponiment. H's nowhere near as good as Sur Lancelot, Melbourne House's last offering, yet that was a 16 K game. The lack of colour and sound. with only three, alithough three different, screens, represents a
poor value and boring package. Melbourne House reckons the game should take a week to complete - hardly a value package - and I completed it in iwo hours. Ventures rating XX - don't buy it! Heififire costs f6 95 and is avalable on the 4ik Spectrum
On to adventurcs. The Hulk was a bug seller last year, despure beng only average in many reviewers ${ }^{\prime}$ opinions. Naw comes the second in the Questprobe series, written by the famous Scolt Adams. This tume your skills le not in turnang green - you wear a red costume to swing around an allfAmerican ctty as web-spimning Spiderman. The lape is weh packaged and includes a mintalure Marvel comic, which I enjoyed readin!!

The point of the game is sumslar to The Hulk - manly collecting gems, and trying to find out more about the mysterious overseer of the series, The Chef Examiner. Out to stop you are a large number of distinctly nasty adversaries. like Hydroman and The Lizard. Strangely, these viltans all appear to have betn deformed accidenially by various scientific experiments, which does not say much for American lifel Another task is to work out how to manufacture your web. Graphics are, as usual, the best in the business.

Spiderman es a lot more fun than The Hulk. There is more to do, and there are more locatoons to do it in. The vocabulary is more friendly now it accepts THEN, commas, full sentences and DROP ALL. The characters will talk to you, and presentation is good. The problems are more imuginative.

I enjoyed this game a lot. Maybe l just preferyed leaping up walls to ripping open my stinn! I also liked the range of difficulty in the problems. The player can get just far enough to maintan his interest. Ventures ratıng: XXXX., Graphics versions are avalable at 5994 for the Spectrum and Commodore, text only costs E 795 for the other popular brands. Be warned, text is sparse.

I have one query. Marvel seems to be using up the best known characters first. After the Fantastic Four, who are next, who can they use? Disturbing thoughts, particularly as this is a semes of 12

Finally, a slighly late look at The Backpackers' Gude To The Universe, from Faniasy, As super-hero Ziggy, you discover that the infinitely evil Scarthax has given just 24 hours' notice before the pulls the Greal plug. whereupon the whole of the unaverse will flow down the plaghole.

To save realny, you decte help is needed, so you visit the Caverns Of Exite. Here, variety of odd and, to be honest, slightly obnoxious, aliens are hetd in cages, for their own good, or everyone else's. You enter the Caverns to find them, carrying a backpack which will hold a seemingly infinate number of objects.

The problem is, once the creatures are in the pack, you have to keep them alve. This is not just a chse of finding food - oh no. The Double-Headed Emu of Quark, for example, is severely schizophrente, and requires a book of Zalurian love poems, so that one of it's heads can read the more angry one to steepl This and other vital information can be found on the Backpackers' Guide To The Universe, which is on sute one of the casselie. On side two is the game..
In practice, it is fun to play


The graphecs are extremely attracuve and smooth, and colour expertly used. There are wraths to be shot, but they are not ins interesting thent Fantusy aliens and tend to hinder your proyress, rather than supply a chatlenge. Backpackthg around, trying to find which objects sult which creatures, is a daunting task, but fun

Agann, this game has no sound. Backpackers' Guide is a
very complex arcventure. It is perhaps a bit too complex, and quite pricey, at $£ 7,50$. Also, it lacks the action content of, say, Pyjamarama. In all, a Ventures rating of $\mathbf{X X X}-$ inferestung but at boring. I have high hopes for the second of this trlogy. Incıdentally, J'll be revicwing another Fantasy game, Drive In, next week

## The Map

Here is part one of our map of

Hewson's exceltent Technician Ted. This section stems oul from The Mann Corridor, as seen on the intay card. I would be interested to see any of your maps, and the next part of this will be next time, which will also include a list of tasks to follow the first three.

Back next tume with a bumper helpline, more of the map, and reviews of Drive $\ln _{4}$ Macbeth, Pufall II and more. Happy venturang!



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## This pontoon program by P J Cockerton means you can gamble without losing money

This is a Pontoon program which has all the features of the organal including aces high or low and five card tracks

After the tutle page you are given $£ 100$ and you muss bet on every game you play. When you have placed your bet the reverse sides of two playing cards are shown: top left is your card and bettom left belongs to the computer
You must keep laking an extra card by pressing $T$ - twist - until the sum of your cards adds up to 21, or as near to that figure as you can get. If the total exceeds 21 then you bust. Once you press S - suck then it is the comptuter's turn.

The game uses full size playmg cards which are farned out so you can see all your cards at once

## \%

[J card outhnes
日k\$ palterp on reverse of cards AXS. B/S. C/S, D/S, E/S. 1/5, KKS card positiotimg strung
C. random card numbers SC adjution of cards
A number of aces in hamct $Y$ number of grime won ME sames won by computit


P1 sum total of cards Cl-C9, b1-[19 stop random catd numbers appearing twice
As used to read dara
4\% casd symhals
T1 positioning of symbols
BR black of ped symbols
G your tum, compure's tuma
Kt. send to tutle page only al
sfart of new game
CO colour memory map locinเกรง
T0 volurse control
W F wave form
AD altack and delas
H1 hagh frequisency
10 low frequency
$4 R$ susiain and retease
Q five card track

## How II works

30-70 en up tring vartable
110 sels up screen for play
115 gets randorn card number
216 gets randomn symbols
220-201 P()kEs card numbet and symbols onto screen 209.272 prinis pucture cards 287-295 Win, bast, etc. rautines 2500-2000 stalus page informeいo!
3000-3020 check random cards only appetar once in sume $4000-4010$ symbols for pleture card
snot-5030 card fick sound effect
60ND-6020 3D pontoon display wowo title page routine



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POKETL＋41．SY





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263 IFC＝12THENKK＝17
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## Thumbs up

I would like to thank you for all the support you are giving the Orit Atmos.

It may not be a very popular computer, but you are helpug us Almos owners gann more securnty in them Keep up the good work

Oalre Woods, Donogal rown


## Look bofore

## you laap

Whale I congratulate Phul Abe om my alemuar programb fion the (ot lic 43 ) here a mesmere for all ( $\mathrm{H}-\mathrm{A}$. aters whu hate been 'avtomat ne the themete by le mgatim that the Esatide of Iralangur Has fonert on a a what os Wasll'।
[he 2.01 of Chtaler 16.k was Monday! Phil has accounted for leap years in line numbers 80 and 100 by dividing by four, and normally every century yoar (1800), $\mathscr{F}^{(x)} \mathrm{ec}$ ) would be s
 to further compensate for the error in the solar year, only century years divisible by 400 are leap ycars (i.e. 1600,2000 etc).

The year 1900, for example, was not a leap year, hence the error in the dtay of the batte above.

The correction is simple, althoweh it atdue ambulerathis
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Every time I turn to the lettery page of HCW, 1 look 10 see if there are any


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AKovanagh, Scotland
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## Thumbs up to

Amstrad
I an the owner of an Amstrad CPC464 Each weeh ! buy Home Compulng Weekly maxazue and I thunk it is a very good compules
 the whers piate l satw an letm ment ontry that progratmmung anticles would appear shortlv

I have now seen some of these and I am very pleased with thean

Coudd I please have a list of all Amstrad CPC464 tapes on the market?

## Poscal Sondron, Bollincen

If vour want to know ahour soffware for the Amsirad then Amsoff is the best firm to comtact at brenswood thes. 1/7 Gurman Rd, Tolfentoms London AI7


## HCW needs you

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Programs are always supplied on cassete and are accompanied by full details of the program varjables. Please type these details double-spaced. Listings are helpful, but not essentral. What is vital is that the prograns should be completely error free, so please double check.

Articles on certan aspects of using home computers should be no longer than 1000 words. Try to keep to the style you see in HCW and include programming examples where they will help the reader understand the subject. We will convert your sketched illustrations into final artwork.

We also use short tips, artucles and brief programming routines. Any discoveries you have made about your machine might be of interest to other readers.

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Always use a coupon firmly fixed to the back of your envelope, and fully complete and enclose the cassette inlay card.

We are particularly interested in programs with less than 100 actual lines of BASIC. All submissions are acknowledged.

## Send your programs to HCW!



## Liz Graham spoke to Eddie Kidd, star of Martech's Jump Challenge. Read about the thrills and spills of being a motorbike superstar




Eddie Kıdd is still going slrong after 10 years performing motorbike stunts, and if you've had go at Martech's Eddic Kıdd Jump Challenge, you't have begun to understand some of the hazards and problems he has to face when going for a record jump.

Eddee was involved in the setting up of Martech's game, and he acted as advisor on some of the technical aspects. He explamed what can go wrong and this is real life, not just on a compurer screen.
'One big problem is head winds, which you have to cope with,' he said. 'You also have to sit correctly and have your balance just tight."
He went on: "If you sis too far forward the bike will dip and you'll crash. On the other hand, if you sit too far back. the bike tups up and you go over.'
These aspects are reflected in Martech's game, although the element of risk isn't a fraction of the dangers Eddhe faces each
tume he jumps. Eddie's next big jump is at Carjısle, on March 17, and he's in intensive traming for the event.
'I work out at the gym every other day,' he explained. 'I also go swimming, run and cycle 20 miles every Sunday. I've got a special dier which I'm supposed to follow, but 1 haven't been sticking to it relighously, ${ }^{\text {a }}$

The jump in Carlisle over the River Eden is a thecky one: "ta's the worst one yel.' Eddie sard, 'The run-up's partucularly diffecult."

Eddie hidd has been a professional motorbike stunt rider since he was 15. He's also been invoived in teveral [films, and is now branching out into the world of pop.
'I'm writing some songs whith 1 friend, and l've already made one record called Reggae Man, which has been released in Sweden. I'm looking to set up a deal with a record company over here - I used 10 be with Desca Records.'



Page 42 HOME COMPUTING WEEKIY IZ March 198s
 directions and the diagonal directions register well too With it's strong leaf swatches this is one stick which is bekelv to survive even the hardest of games for a long time

The strek I used wasn't the rapid fire version, but there is one avallable. The fire buttons are both well located and postive in reaction

The four sucker pads on the base give good mdhesion, but they are in the way if you prefer 10 play with the stick hand-held This is of particular importance If you use the lower fire button a great deal
The price of this stick is right and I will be using it for a number of alien bashing sessions in the days and months to come.
J.B.

## Vulcan joystick inlerfaces

 BBC B and Eleciron £12/£19.95Vulcan Electronics, 200 Brent St , Hendon, London NW4

Joystuck interfaces mught seem common place to those who have machines with the joystick facilty butt in, but they can make a vast difference to those using computers without the faciltity

These are both sumple plug en connection boxes but both add facthetes which the avd games
player is likely to want
The Electron interface is fixed to the rear expansion connector and canil be inserted the wrong way round due to the use of a kevwav. There are two problems inherent in thas type of product. Firstly, once connected there are no further expansion possibilities avalabie and secondly there is no suppori for the case from the machune thelf
However. there are no problems with the interface's operation once conmected and the tapes supplied are likely to give you full control over mosi pames

The BHC already has an interface as standard, but this version allows you to use the excellent range of Aları style joysucks miluding those with rapid fire features. The tape supplied wilh this anierface has versions for those games which require ADVAL conversions too. There is a swith on the top to allow you to select the horizontal direction as a number of BBC games are non standard

Both products are well-bult and should give a good lifetime's use: particularly noteworthy are the meral connectors on the BBC version.

J B.
....and joystick interfaces




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